

What is claimed is:

1. A method of operating a control system for an automotive vehicle comprising:

determining a relative roll angle;

when the relative roll angle reaches a threshold, initiating a wheel departure angle determination; and

controlling a safety system in response to the wheel departure angle.

2. A method as recited in claim 1 further comprising determining the vehicle is in a transition; and

when the relative roll angle reaches a threshold and the vehicle is in the transition, initiating a determination of a wheel departure angle.

3. A method as recited in claim 1 wherein the transition is a right to left transition.

4. A method as recited in claim 1 wherein the transition is a left to right transition.

5. A method as recited in claim 1 wherein the step of initiating is performed when the relative roll angle increases to the threshold.

6. A method as recited in claim 1 further comprising a generating a roll signal for control in response to the wheel departure angle and wherein controlling a safety system comprises controlling a

safety system in response to the roll signal for control.

7. A method as recited in claim 1 wherein controlling a safety system comprises controlling a rollover control system to counteract a vehicle rollover.

8. A method as recited in claim 1 further comprising detecting a double wheel lift; and
boosting the roll signal for control in response to the double wheel lift.

9. A method as recited in claim 1 further comprising applying a brake pressure to counteract rollover, determining the vehicle may be bouncing, in response to bouncing holding the brake pressure.

10. A method of operating a control system for an automotive vehicle comprising:
determining the vehicle is in a transition;
determining a relative roll angle;
when the relative roll angle reaches a threshold and the vehicle is in a transition, initiating a wheel departure angle determination;
determining a roll signal for control in response to the wheel departure angle; and
controlling a safety system in response to the roll signal for control.

11. A method as recited in claim 10 further comprising detecting a double wheel lift; and

boosting the roll signal for control in response to the double wheel lift.

12. A method as recited in claim 10 further comprising applying a brake pressure to counteract rollover, determining the vehicle may be bouncing, in response to bouncing holding the brake pressure.

13. A method of controlling a vehicle comprising:

- determining a roll signal for control;
- determining a relative roll angle;
- determining a double wheel lift; and
- in response to determining double wheel lift and the relative roll angle, increasing the roll signal for control to a boosted roll signal for control.

14. A method as recited in claim 13 further comprising performing increasing when the left side is lifted and the relative roll angle is positive.

15. A method as recited in claim 13 further comprising performing increasing when the right side is lifted and the relative roll angle is negative.

16. A method of controlling a vehicle comprising:

- applying a brake pressure to prevent rollover;
- determining the vehicle is bouncing; and

holding the brake pressure when the vehicle is bouncing.

17. A method as recited in claim 1 wherein the transitional maneuver is a right to left maneuver.

18. A method as recited in claim 1 wherein the transitional maneuver is a left to right maneuver.